

SWP Water Quality Summary

November 9 to December 7, 2010

Electrical Conductivity: EC decreased at Harvey O. Banks Pumping Plant (HBP) and Vallecitos, but increased at Check 29, Check 41 and Barker Slough. Concentrations ranged from 219 $\mu\text{S}/\text{cm}$ to 511 $\mu\text{S}/\text{cm}$ (132 mg/L to 307 mg/L), below the Article 19 Monthly Average Objective of 440 mg/L (733 $\mu\text{S}/\text{cm}$). At the end of the month, the highest concentration of 511 $\mu\text{S}/\text{cm}$ (307 mg/L) occurred at Check 29, while the lowest concentration of 253 $\mu\text{S}/\text{cm}$ (152 mg/L) occurred at Barker Slough. The 29-day average concentration at Harvey O. Banks Pumping Plant (HBP) was 478 $\mu\text{S}/\text{cm}$ (287 mg/L).

Bromide*: Concentrations exceeded the California Bay-Delta Authority (CBDA) Objective of 0.05 mg/L at all locations. Concentrations ranged from 0.06 mg/L to 0.24 mg/L. At the end of the month, Check 29 had the highest concentration of 0.24 mg/L, while the lowest concentration of 0.07 mg/L occurred at Barker Slough.

* Bromide concentrations are calculated values using linear regression equations using EC concentrations and are not as accurate as bromide concentrations from laboratory analysis.

Turbidity: Turbidity levels decreased at Check 29, Check 41, Barker Slough and Vallecitos, but increased at HBP. Turbidity ranged from 2.3 NTU to 36.5 NTU. At the end of the month, the lowest level of 2.3 NTU occurred at Check 29, while the highest level of 28.3 NTU occurred at Barker Slough. The 29-day average turbidity level at HBP was 11.5 NTU with a 40% change.

Dissolved Organic Carbon (DOC): Concentrations increased at HBP and Check 13, but decreased at Edmonston. The DOC 29-day average concentrations were 2.2 mg/L at HBP, 2.2 mg/L at Check 13 and 3.0 mg/L at Edmonston.

Taste and Odor Compounds: MIB and geosmin concentrations in the SWP ranged from non-detect to 6 ng/L at Clifton Court Inlet, HBP, Del Valle Check 7, O'Neill Forebay Outlet (Check 13), San Luis Reservoir and Pacheco Pumping Plant Outlet.

Ground water pump-ins to the California Aqueduct totaled 6,545 AF. The break down of the total volume was:

- Arvin-Edison Water Storage District = 2 AF
- Kern Water Bank Authority (who operate the Kern Water Bank Canal) = 261 AF
- Semitropic (2&3) Water Storage District = 6,282 AF

As of December 7, 2010, no data was available for Devil Canyon due to maintenance driven station shut down.

Note:

The intent of the monthly water quality (WQ) summary is to acquaint state water contractors, scientists and interested parties with the status of water quality in the State Water Project (SWP). Your comments, questions and suggestions are welcome and should be directed to Cindy Garcia at 916-653-7213, or Austine Eke at 916-653-7227. To view WQ data from the automated stations along the SWP, visit: http://www.water.ca.gov/swp/waterquality/AutostationData/Autostation_map.cfm, and click on a station name on the map to link to the station's data on the California Data Exchange Center (CDEC) website.

To view the Edmonston daily AF pumping data, visit: www.water.ca.gov. Click on the “State Water Project” tab, and click on the “Operations Control” link. Look under the “Project-Wide Operations” header for the “Dispatcher's Daily Water Report.”

SWP Water Quality Report

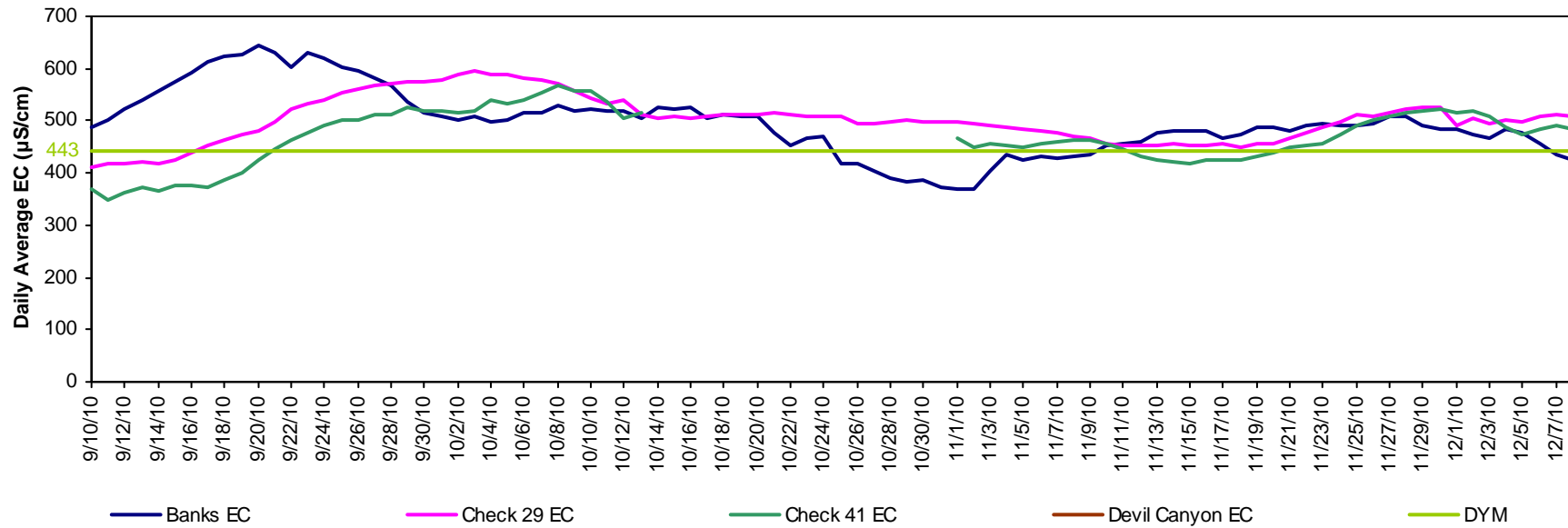
DWR Operations & Maintenance Water Quality Automated Station Data from November 9 to December 7, 2010

Automated sampling stations provide real time data by continuously measuring water quality conditions in the California Aqueduct.

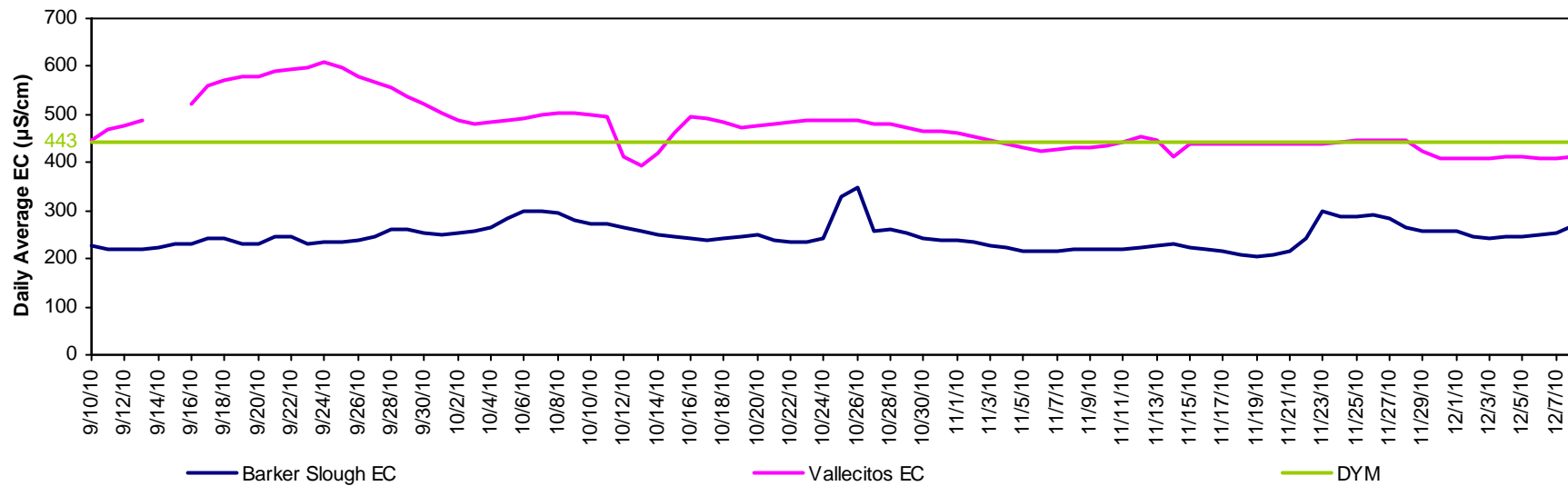
Water Quality Parameters	Objective	Range	Harvey O. Banks PP KA000331	Check 29 KA024454	Check 41 KA030341	Devil Canyon KA041288	NBA at Barker Slough KG000000	Vallecitos KB002250	Check 13 O'Neill Forebay Outlet KA007089	Edmonston PP Milepost 293.45
EC (µS/cm)	733**	11/9/2010	437	466	463	No	219	431		
		12/7/2010	434	511	490	Data	253	410		
		% change	-1	10	6		16	-5		
		29-day Avg.	478	483	468		243	431		
Bromide (mg/L)	0.05*	11/9/2010	0.187	0.21	0.21	No	0.06	0.18		
		12/7/2010	0.185	0.24	0.23	Data	0.07	0.17		
		% change	-1	14	10		17	-6		
		29-day Avg.	0.22	0.22	0.21		0.07	0.18		
Turbidity (NTU)		11/9/2010	8.5	4.6	5.7	No	36.5	5.8		
		12/7/2010	11.9	2.3	2.7	Data	28.3	3.0		
		% change	40	-50	-53		-22	-48		
		29-day Avg.	11.5	3.7	3.5		30.8	3.5		
DOC (mg/L)	3.0*	11/9/2010	2.0						1.7	2.9
		12/7/2010	2.1						2.4	2.3
		% change	5						41	-21
		29-day Avg.	2.2						2.2	3.0
Taste & Odor Parameters	Range	Clifton Court KA000000	Harvey O. Banks PP KA000331	Lake Del Valle, Check 7 KB001632	Check 13 O'Neill Forebay Outlet KA007089	Check 41 KA030341	Check 66 KA040341	Castaic Lake	Lake Perris	Silverwood Lake
MIB (ng/L)	11/15/2010	1-3	1-2	ND-1	2	9-14	11-16	ND	6	5-10
Geosmin (ng/L)	12/2/2010	3-6	3-5	ND	5	7-9	12-18	ND	ND-1	4-7

*CBDA Objective; **Article 19 Monthly Average (converted from 440 mg/L to 733µS/cm); ND = Non-detect.

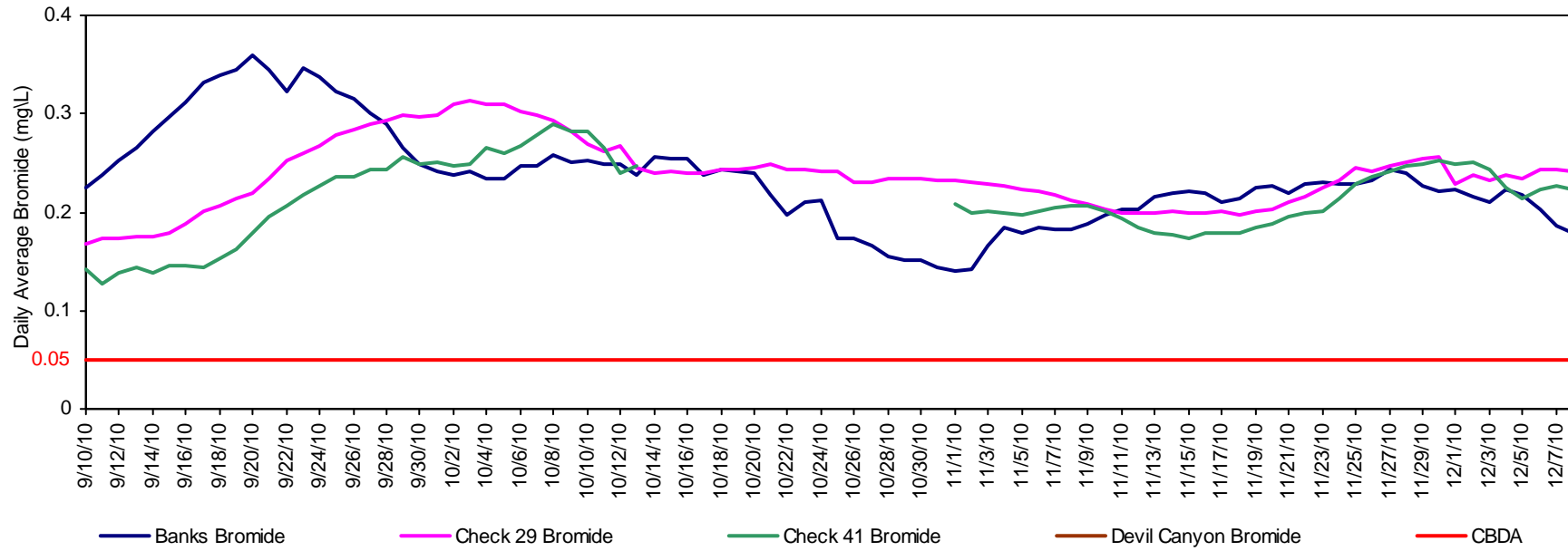
California Aqueduct - Electrical Conductivity



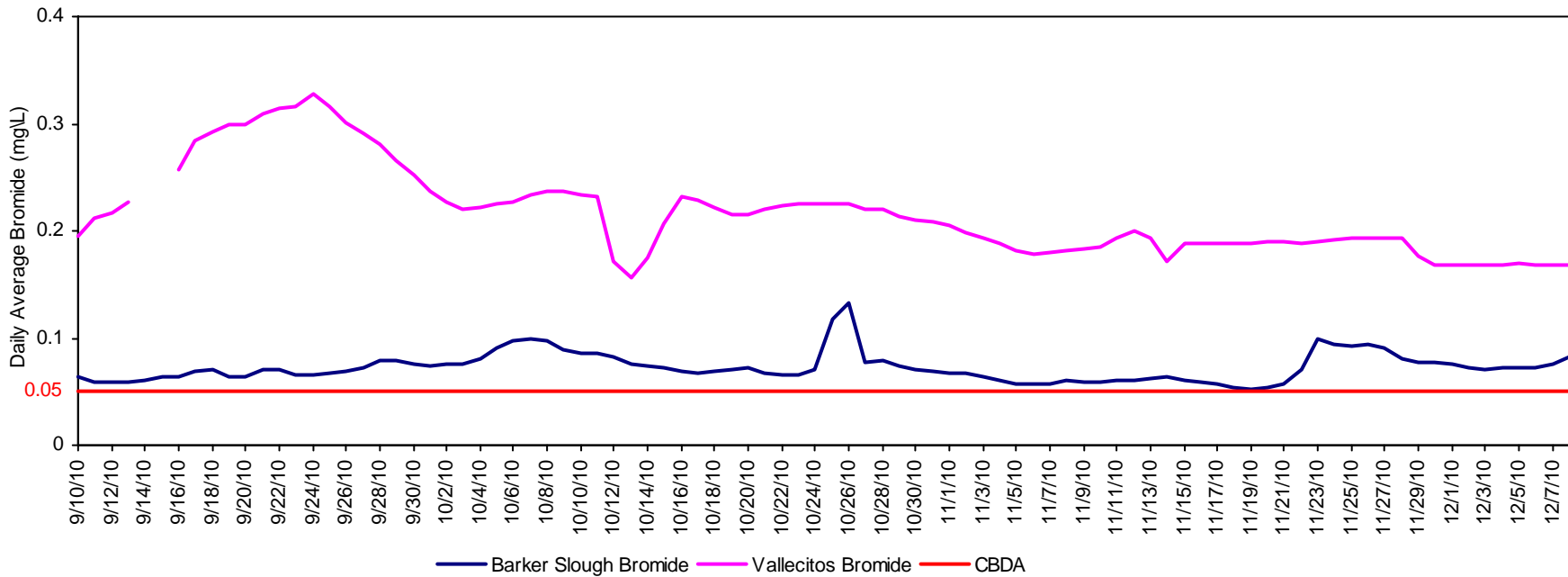
North and South Bay Aqueduct - Electrical Conductivity



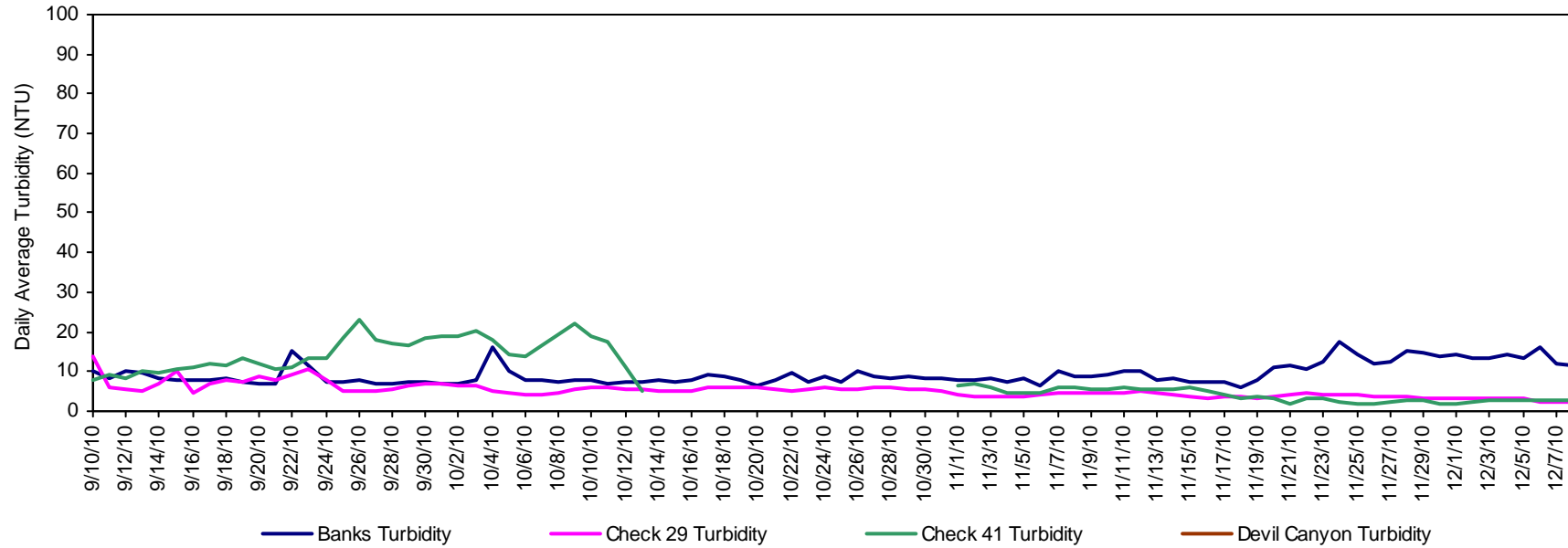
California Aqueduct - Calculated Bromide



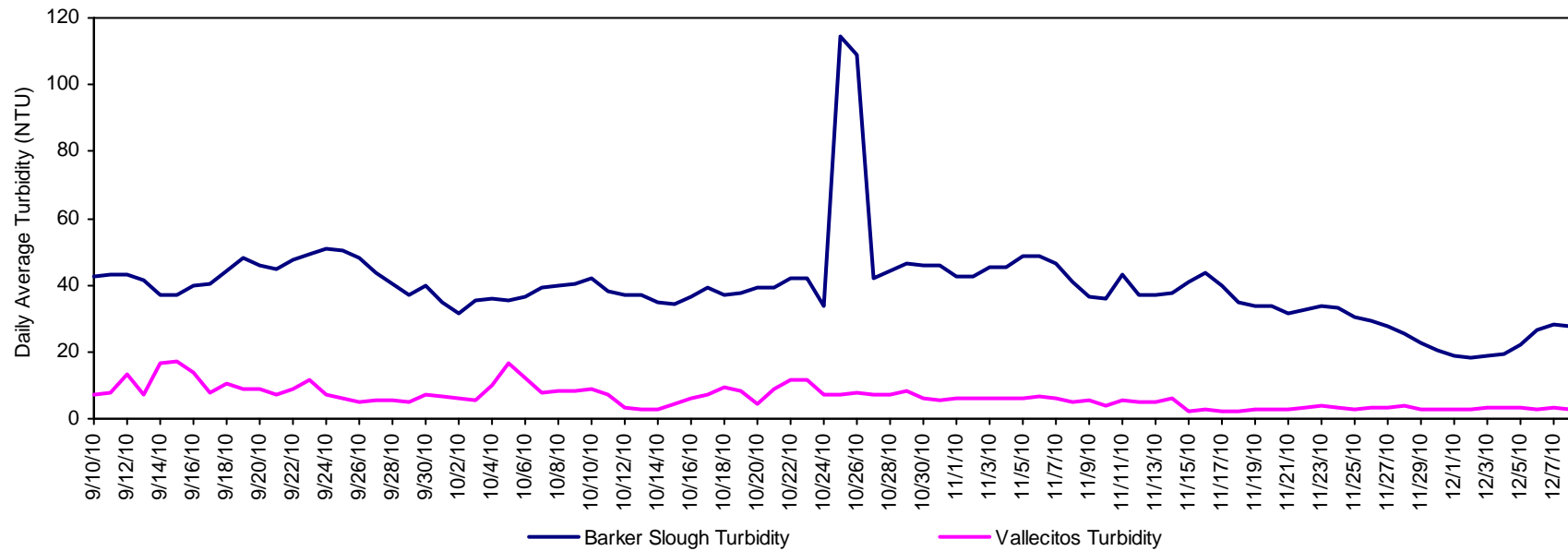
North and South Bay Aqueduct - Calculated Bromide



California Aqueduct - Turbidity



North and South Bay Aqueduct - Turbidity



California Aqueduct
Calculated Dissolved Organic Carbon

